

### REMARKS

The Official Action of 14 March 2007 has been carefully considered and reconsideration of the application as amended is respectfully requested.

The independent claim, claim 4, has been amended to incorporate the recitations in claims 3 and 4 of the application as filed, whereby to limit the recited sulfonyl group-containing (co)polymer to a non-diene-based, sulfonyl group-containing (co)polymer which is an acryl-based, sulfonyl group-containing (co)polymer. Applicants respectfully note that the terms “acryl-based” and “diene-based” have well recognized meanings in the art, as shown for example by the recitation of these terms in **the claims** of 73 issued patents (“acryl-based”) and 297 issued patents (“diene-based”) respectively (see attached printouts showing the results of USPTO Patent Full-Text and Image Database searches for claims containing these terms). (Applicants respectfully note that, since “diene-based” has a well recognized meaning, “non-diene-based” does as well. See MPEP 2173.05(I).) In any event, the meanings of these terms is apparent from their use in the specification as filed (see specification at, e.g., page 17, line 18 to page 20, line 6).

In line with the above, Applicants respectfully traverse the rejection under 35 USC 112, second paragraph appearing at paragraph 4 of the Official Action. As is known to those of skill in the art, and as is apparent from the examples of monomers described in the specification at page 19, an “acryl-based” (co)polymer is one that comprises a unit derived from an acryl monomer.

Since the meaning of all terms in the claim would be apparent to one of skill in the art, Applicants respectfully submit that the claims are sufficiently definite to satisfy the dictates of 35 USC 112, second paragraph. Accordingly, Applicants respectfully request that the Section 112 rejection be withdrawn.

Claim 4 stands rejected under 35 USC 102(a) as allegedly being anticipated by WO 01/48100. Claim 5 stands rejected under 35 USC 103(a) as allegedly being unpatentable over WO 01/48100 in view of EP 892024. Applicants respectfully traverse these rejections.

Applicants respectfully note that the cited primary reference, WO 01/48100, was filed after November 29, 2000 and was not published in English under PCT Article 21(2) such that it has no 35 U.S.C. 102 (e) prior art date. See MPEP 706.01(f)(1). Accordingly, the reference is only citable as of its PCT publication date of July 5, 2001, which is **after** the filing dates of Applicants' Japanese priority applications. Applicants submit herewith an English translation of their first priority application to overcome the reference. See MPEP 201.15.

Claim 4 stands rejected under 35 USC 103(a) as allegedly being unpatentable over JP 11217525 in view of Sano et al. Claim 5 stands rejected under 35 USC 103(a) over this combination of references further in view of EP 892024. Applicants respectfully traverse these rejections.

The amendment to the claims, which restricts them to “non-diene-based” sulfonyl group-containing (co)polymers, removes the bases for rejection over combinations comprising as primary reference, JP 11217525, which is directed to “diene-based” embodiments.

Claim 4 stands rejected under 35 USC 103(a) as allegedly being unpatentable over Ota et al. Applicants respectfully note that Ota et al may be disqualified as a reference against the present application under the provisions of 35 USC 103[c], and the undersigned hereby makes the following statement on behalf of Applicants whereby to disqualify the reference:

**"The present application and Ota et al US Patent 6,916,862 were, at the time the invention of the present application was made, owned the same company, Seiko Epson Corporation."**

The claims stand rejected under 35 USC 103(a) as allegedly being unpatentable over Nguyen et al in view of Sano et al or over this combination of references further in view of EP 892024. The claims also stand rejected under 35 USC 103(a) as allegedly being unpatentable over Kurabayashi et al in view of Sano et al. Applicants respectfully traverse these rejections.

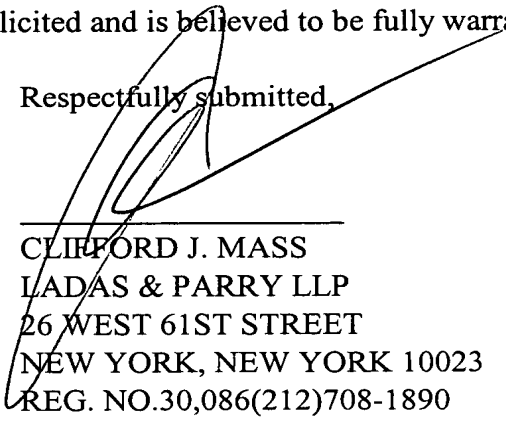
The claimed invention requires that the recited sulfonyl group-containing (co)polymer is present in the claimed ink composition in the form of an emulsion. This feature is not

shown or suggested in either of the cited primary references, wherein the (co)polymer that allegedly corresponds to the claimed second (co)polymer appears to encapsulate or associate with a colorant. Indeed, the Examiner has respectfully not pointed to any portion of the cited references to show or suggest this claimed feature whereby the references are respectfully incompetent to set forth even a *prima facie* case of obviousness for the invention as claimed. See MPEP 706.02(j) ("To establish a *prima facie* case of obviousness. . .the prior art reference (or references when combined) must teach or suggest all the claim limitations.").

In view of the above, Applicants respectfully submit that all rejections and objections of record have been successfully traversed and that the application is now in allowable form.

An early notice of allowance is earnestly solicited and is believed to be fully warranted.

Respectfully submitted,



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ACLM/"acryl based": 73 patents.

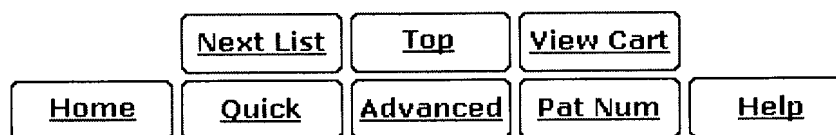
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PAT. NO.	Title
1 <a href="#">7,255,981</a>	<a href="#">T Mask, substrate with light reflective film, method for manufacturing light reflective film, liquid crystal display device, and electronic apparatus</a>
2 <a href="#">7,226,520</a>	<a href="#">T Method for forming pattern and method for forming multilayer wiring structure by droplet discharge system</a>
3 <a href="#">7,218,450</a>	<a href="#">T Light diffusing film</a>
4 <a href="#">7,192,621</a>	<a href="#">T Keypad and method of separating a crosslinked cured resin layer thereof</a>
5 <a href="#">7,176,605</a>	<a href="#">T Plasma display device having anisotropic thermal conduction medium</a>
6 <a href="#">7,173,077</a>	<a href="#">T Aqueous glittering ink composition</a>
7 <a href="#">7,165,557</a>	<a href="#">T Hair-transplanting apparatus and method and resulting hair-transplanted piece</a>
8 <a href="#">7,160,960</a>	<a href="#">T Pressure sensitive adhesive composition and sheet, and adhered article</a>
9 <a href="#">7,122,271</a>	<a href="#">T Battery unit and lithium secondary battery employing the same</a>
10 <a href="#">7,075,601</a>	<a href="#">T Thin film transistor array for a liquid crystal display having a data line cross-connection</a>
11 <a href="#">7,052,784</a>	<a href="#">T Organic electroluminescent device using a mixture of high and low molecular light-emitting substance as a light-emitting substance</a>
12 <a href="#">7,005,183</a>	<a href="#">T Application sheet used for pressure-sensitive adhesive sheet for painting</a>
13 <a href="#">6,989,408</a>	<a href="#">T Method for preparing acryl based impact-reinforcement</a>
14 <a href="#">6,969,889</a>	<a href="#">T Wire structure, a thin film transistor substrate of using the wire structure and a method of manufacturing the same</a>
15 <a href="#">6,937,304</a>	<a href="#">T Array substrate for transfective LCD device and method of fabricating the same</a>
16 <a href="#">6,933,043</a>	<a href="#">T Decorative floor covering comprising polyethylen terephthalate film layer in surface layer and manufacturing method of the same</a>

- 17 6,916,532 **T** Adhesive tape for painting
  - 18 6,913,801 **T** Printing media for inkjet printer
  - 19 6,906,331 **T** X-ray detector and method of fabricating therefore
  - 20 6,876,121 **T** Flat oscillation motor equipped with a brush apparatus
  - 21 6,870,198 **T** Organic electroluminescent device using mixture of phosphorescent material as light-emitting substance
  - 22 6,850,294 **T** Liquid crystal display
  - 23 6,836,012 **T** Semiconductor package and method of manufacturing the same
  - 24 6,824,845 **T** Multicolor image-forming material and method for forming multicolor image
  - 25 6,797,407 **T** Metallic plate material for electric/electronic instrument and electric/electronic instrument using same
  - 26 6,776,745 **T** Toner supply roller
  - 27 6,767,435 **T** Bright surface structure and a manufacturing method thereof
  - 28 6,744,486 **T** Liquid crystal display device and method of fabricating the same
  - 29 6,740,354 **T** Method of manufacturing thermal transfer film for forming three dimensional patterns through dissolution processes
  - 30 6,737,753 **T** Barrier stack
  - 31 6,737,653 **T** X-ray detector and method of fabricating therefore
  - 32 6,733,863 **T** Optical-use adhesive film and roll thereof
  - 33 6,674,155 **T** Chip carrier film, method of manufacturing the chip carrier film and liquid crystal display using the chip carrier film
  - 34 6,674,007 **T** Shielding for multicore shielded wire
  - 35 6,654,076 **T** Transflective liquid crystal display device and method of fabricating the same
  - 36 6,620,655 **T** Array substrate for transflective LCD device and method of fabricating the same
  - 37 6,569,919 **T** Composition exhibiting reversible color change and exterior parts for clock using the same
  - 38 6,552,769 **T** Method for fabricating liquid crystal display panel with sealant on both sides of a peripheral groove
  - 39 6,549,251 **T** LCD having barrier layer in same plane as gate electrode and method of fabricating
  - 40 6,545,827 **T** Optical sheet
  - 41 6,536,227 **T** Direct cooling type refrigerator
  - 42 6,534,270 **T** Biochip and method for fabricating the same
  - 43 6,531,208 **T** Dissolution type thermal transfer film for three dimensional patterns and method for manufacturing the same
  - 44 6,521,337 **T** Adhesive tape for painting
  - 45 6,504,096 **T** Semiconductor device, methods of production of the same, and method of mounting a component
  - 46 6,475,714 **T** Image forming material
  - 47 6,458,467 **T** Optical-use adhesive film and roll thereof
  - 48 6,456,355 **T** Liquid crystal panel having a plurality of ribs for a liquid crystal display device
  - 49 6,444,267 **T** Method for manufacturing gravure-transfer-coated steel plate
  - 50 6,406,969 **T** Method of manufacturing a thin film transistor array substrate
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**ACLM/"diene based": 297 patents.**

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PAT. NO.	Title
1 <a href="#">7,262,254</a>	<a href="#">T Tire with low volatile alcohol emission rubber tread with compositional limitations</a>
2 <a href="#">7,250,465</a>	<a href="#">T Rubber composition containing block copolymer and tire having component thereof</a>
3 <a href="#">7,250,203</a>	<a href="#">T Airsleeve</a>
4 <a href="#">7,249,621</a>	<a href="#">T Rubber composition and tire with component of diene-based elastomer composition with corncob granule dispersion</a>
5 <a href="#">7,247,669</a>	<a href="#">T Rubber prepared with precipitated silica and carbon black pellet composites of controlled hardness and tire with component derived therefrom</a>
6 <a href="#">7,214,731</a>	<a href="#">T Tire with low hydrocarbon emission rubber combination of tread and sidewall components with compositional limitations</a>
7 <a href="#">7,201,641</a>	<a href="#">T Polishing body</a>
8 <a href="#">7,183,347</a>	<a href="#">T Dip moldings, composition for dip molding and method for producing dip moldings</a>
9 <a href="#">7,179,866</a>	<a href="#">T Vibration damping rubber composition</a>
10 <a href="#">7,163,975</a>	<a href="#">T Tire with compound of rubber composition comprised of silanol and/or siloxy functionalized elastomer and silica</a>
11 <a href="#">7,156,137</a>	<a href="#">T Preparation of starch reinforced rubber and use thereof in tires</a>
12 <a href="#">7,137,423</a>	<a href="#">T Tire with component comprised of amine functionalized styrene/diene copolymer elastomer, silanol functionalized carbon black and coupling agent</a>
13 <a href="#">7,134,468</a>	<a href="#">T Pneumatic tire having an innerliner comprised of butyl rubber and dispersion of corncob granules</a>
14 <a href="#">7,131,474</a>	<a href="#">T Tire with rubber tread of load bearing central and lateral zones</a>
15 <a href="#">7,122,586</a>	<a href="#">T Preparation of silica-rich rubber composition by sequential mixing with maximum mixing temperature limitations</a>



- 16 7,117,911 **T** Pneumatic tire having run flat capability
- 17 7,101,922 **T** Method for preparing elastomer/silica composite
- 18 7,087,660 **T** Preparation of components and articles with directed high frequency energy heated silica-rich rubber components containing high softening point polymer and sulfur curative
- 19 7,071,251 **T** Tire with component comprised of rubber composite of styrene/butadiene elastomer containing pendent silanol and/or siloxy groups
- 20 7,045,201 **T** Starch-modified aqueous adhesive dip, treated yarns therewith and tire having component of rubber composition containing such treated yarns
- 21 7,040,366 **T** Tubeless pneumatic tire with carcass having butyl-based inner topping rubber layer
- 22 7,019,084 **T** Tire with rubber composition
- 23 7,015,272 **T** Rubber with polyethylene and phenylene bismaleimide and tire with component thereof
- 24 7,015,259 **T** Clear ink composition, ink set, and method for producing inkjet record
- 25 7,011,891 **T** Rubber product surface treating method
- 26 7,001,946 **T** Tire with tread of natural rubber-rich rubber composition
- 27 6,998,448 **T** Tire with tread of CIS 1,4-polybutadiene rich rubber composition which contains a functional styrene/butadiene elastomer, silica and coupling agent
- 28 6,994,137 **T** Tire with component of carbon black rich rubber composition which contains alkylphenoxypoly (alkyleneoxy) alkanol
- 29 6,972,307 **T** Rubber composition containing nanoscaled zinc oxide particles
- 30 6,962,181 **T** Pneumatic tire having built-in sealant layer and preparation thereof
- 31 6,959,744 **T** Tire with rubber tread of diverse zoned rubber compositions
- 32 6,959,743 **T** Tire with silica-rich tread cap layer and carbon black-rich supporting transition zone of intermediate and base layers
- 33 6,956,093 **T** Preparation of syndiotactic polybutadiene, rubber composition and tire with rubber component
- 34 6,932,132 **T** Tire with rubber sidewall containing trans polybutadiene and brominated copolymer
- 35 6,932,130 **T** Tire wheel assembly
- 36 6,927,255 **T** Rubber composition
- 37 6,913,329 **T** Endless rubber track having guide lugs with guide lug support layer, and vehicle containing such track
- 38 6,911,253 **T** Porous resin film
- 39 6,906,129 **T** Polymer scale preventive agent
- 40 6,894,103 **T** Electropolymerization modified carbon black and articles including tires having at least one component containing such modified carbon black
- 41 6,887,929 **T** Resin composition and golf ball
- 42 6,884,468 **T** Method of making a paper coating using a blend of a vinyl aromatic-acrylic polymer dispersion with a vinyl aromatic-diene polymer dispersion
- 43 6,878,760 **T** Preparation of starch reinforced rubber and use thereof in tires
- 44 6,861,462 **T** Nanocomposite formed in situ within an elastomer and article having component comprised thereof
- 45 6,858,665 **T** Preparation of elastomer with exfoliated clay and article with composition thereof
- 46 6,855,034 **T** Polishing pad for semiconductor wafer and laminated body for polishing of

semiconductor wafer equipped with the same as well as method for polishing of semiconductor wafer

47 6,852,785 **T** Vulcanizable elastomeric compositions for use as tire treads

48 6,848,974 **T** Polishing pad for semiconductor wafer and polishing process using thereof

49 6,838,538 **T** Hydrogenated modified polymer, process for producing the same and composition containing the same

50 6,838,511 **T** Tire with configured rubber sidewall designed to be ground-contacting reinforced with carbon black, starch and silica

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